

BOOK REVIEW

STEPHEN INGRAM. 2008. **Cacti, Agaves, and Yuccas of California and Nevada.** (ISBN 978-0-9789971-0-6, pbk.; 978-0-9789971-1-3; hbk.). Cachuma Press, P.O. Box 560, Los Olivos, California 93441, U.S.A. (**Orders:** www.cachumapress.com, 805-688-0413). \$25.95 pbk., \$35.95 hbk., 256 pp., 262 color photographs, 16 botanical watercolors, 52 range maps, 6 3/4" × 9 1/4".

What a beautifully illustrated book! The cover stock for the gatefold cover is 14 point with the binding Smythsewn. The text paper is "Lumi gloss," acid free, and 150 gsm weight. The front cover surface should protect against liquid stains when in the car, wear and tear when carried in a book bag, or from ground debris when in use while doing groundwork.

The paperback version is small and durable enough to carry into the field on camera shoots or collecting forays and large enough so that color images of landscapes show scenic vistas, habitats that characterize the desert ecosystem, and morphological details of individual plants, plant parts, and flowers. The printing of this book has captured the rich colors and hues in the high-resolution photographic images that are displayed as full page or two-page layouts. The landscapes show extraordinary depth of field with cacti in the foreground and mountain ranges in the background and both in focus.

One color image is an outstanding example of Ingram's spectacular photography and is represented by a two-page (176–177) layout that reminds me of Ansel Adams's most famous photograph "Moonrise, Hernandez, New Mexico, 1941" where the fast fading twilight and moonrise involved a magic moment to make a picture that will forever rank as one of the finest black and white images in the history of photography. Substitute the twilight illumination of Parry's nolina flower stalks for Adams's tombstones and the Little San Bernadino Mountains for the Sangre de Cristo Mountains, and you have a color image that is a magic moment. There are a number of magic moments in this book.

The author spent many years traveling more than 30,000 miles on backroads to be at the right place at the right time to take advantage of the ephemeral cactus flowers that have a brief phenological window. Ingram lives on the eastern slope of the Sierra Nevada in the heart of the porcupine prickly-pear habitat. A sense of place becomes part of the areas documented in this book such as the Great Basin Desert, Mojave Desert, and Colorado Desert (part of the Sonoran Desert). The intent of the author is to span the readership from the general public, naturalist, and expert, and increase the appreciation of native plants to enhance conservation, and he deserves five stars for surpassing the highest standards.

This book is divided into five chapters: (1) Evolution, Classification, and Botanical Characteristics; (2) Ecology and Habitats of Cacti, Agaves, and Yuccas; (3) Species Profiles; (4) Conservation and Cultivation; and (5) Exploring the Cactus Country of California and Nevada. The eight appendices are especially informative and increase the value of the book: Cactus, Agave, and Yucca Species of California and Nevada; Major Vegetation Types and Habitats for Cacti, Agaves, and Yuccas; Scientific Names of Non-featured Species; Cholla Species Comparison; Prickly-pear Species Comparison; Species Rarity Status; Education, Conservation and Cultivation Resources; Species List for Selected Public Lands in California and Nevada.

The species profiles for each entry include the common name, the scientific name, a phonetic pronunciation guide, recent synonyms, other common names, a commentary about the plant, a landscape, habit, and flower photograph plus a range map. Identifying characteristics include descriptions of the habit, stems, spines or leaves, flowers, and fruits as appropriate for the species. The chapter on "Conservation and Cultivation" is especially noteworthy since the information—on conservation practices, illegal harvest, cultivation (landscape species), growing plants in containers and gardens, and propagation—will have broad appeal to homeowners and gardeners. The section on "Exploring the Cactus Country of California and Nevada" lists the specific sites where selected species can be found on public lands such as reserves, state parks, national parks, national preserves, wilderness areas, wildlife refuges, and recreation areas.

Sections that aid in using this book as an educational resource to identify common, indigenous, rare, and possibly new species are the excellent key to the genera and a glossary that defines the terminology used in the book. The 15 genera of Cactaceae and Agavaceae that occur in California and Nevada are represented by the famous watercolor paintings by Eugene O. Murman and three by Susan Bazell. The use of sidebars add related factual details that enliven the text. For example, "Packrat Middens and Vegetation History" and "Yuccas and Yucca Moths" in both cases add to the curiosity associated with these plants, especially the yucca moth-flower pollination biology often featured in biology textbooks as obligate mutualism.

Although the references are not cited in the text, the Bibliography has more than 200 citations mostly published in the last ten years. Web sites are also included for additional information. The Index assists the reader by including common names, scientific names by genus and species listed afterwards, national and state parks, and persons of interest.

This book must be on the bookshelf of every library, botanist, ecologist, horticulturist, gardener, landscaper, conservationist, botanical museum, and herbarium and should be available as a textbook for special seminars on the desert ecosystem and at state parks and national parks especially in Western states. Cachuma Press, the editors, and author are to be commended for producing a book that will be cherished by all bibliophiles!—Harold W. Keller, Ph.D., Research Associate, Botanical Research Institute of Texas, Fort Worth, Texas 76102-4025, U.S.A.